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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,203	12/03/2001	Won-Sik Cheong	P67366US0	4417
43569 7590 05/02/2007 MAYER, BROWN, ROWE & MAW LLP 1909 K STREET, N.W. WASHINGTON, DC 20006			EXAMINER PATEL, MANGLESH M	
			ART UNIT 2178	PAPER NUMBER
			MAIL DATE 05/02/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/998,203	<b>Applicant(s)</b> CHEONG ET AL.	
	<b>Examiner</b> Manglesh M. Patel	<b>Art Unit</b> 2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This **Non-Final** action is responsive to the RCE filed on 2/15/07.
2. Claims 1, 3-16 are pending. Claims 1, 15 and 16 are the independent claims.

**Withdrawn Objections**

3. The Objection to the claim 16 has been withdrawn in light of the amendment.

**Withdrawn Rejections**

4. The 35 U.S.C. 102(b) rejections of claims 1-16 with cited reference of Hubbell U.S. 5,966,121 have been withdrawn in light of the amendment and the newly cited art.

***Claims Rejections – 35 U.S.C. 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. **Claims 1 & 3-16 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by VEGAS (NPL, VEGAS Users Manual, 2000, Sonic Foundry inc, pgs 1-398).**

Regarding independent claim 1, *An apparatus for authoring multimedia contents with object-based interactivity, which comprises: a user interfacing unit for providing an interface to thereby edit object-based interactive multimedia contents by using a multimedia information editing and authoring tool, wherein the user interfacing unit includes, an interface for inserting or deleting media objects and editing properties characterizing each media object, an interface for editing a logical relationship between the media objects, an interface for editing a spatial allocation for the media objects, an interface for editing a time allocation for the media objects, an interface for editing a user interactivity for the media objects, and an interface for displaying information for the media objects under editing; an editorial information processing unit for converting the multimedia contents supplied from the user interfacing unit on an object basis to the form applicable to an object-based internal material structure supporting the editorial information authoring,*

*storing the converted contents, and changing the form of the interactive multimedia contents information stored as the internal material structure to the file form so as to perform an input or output process of the contents; and a media coding and decoding unit for encoding and decoding the interactive multimedia contents information provided from the editorial information processing means.*

Vegas is an object based multimedia authoring software wherein the video is represented by frame objects and the audio with peak objects (see page 1, introduction & page 29). Vegas provides the user with an interface for object-based multimedia editing and authoring tools. The interface in Vegas includes the insertion and deletion of objects as shown on page 29 and displayed on the track view which defines the logical relationship between the video frames according to the timeline. Further including an interface with spatial allocation of the media objects which is represented has the entire track view area, where media objects can be placed at any time and any space for appropriate playback see page 46. Further this interface includes time information has defined on the ruler on page 29. The interface allows the user interactivity for modifying elements via cut/drag/paste operations by interacting with the media objects themselves while including information about the object in the track header section. Finally Vegas supports specific file formats for representation in the object format for editing of the multimedia components and the decoding into multiple formats for rendering purposes (see pg 325-326).

**Regarding Dependent claim 3**, with dependency of claim 1, Vegas discloses *wherein, through the user interactivity unit that a user can manipulate a position of a media object, a display starting time of the media object and a display ending time of the media object during displaying edited and authored interactive multimedia contents* (pg 31, wherein the ruler displays the start and end time of the media object).

**Regarding Dependent claim 4**, with dependency of claim 1, Vegas discloses *wherein the user interfacing unit is implemented by an interface capable of editing exact values by utilizing a keyboard, a graphic user interface (GUI), or both of said two interfaces* (see page 1, introduction & page 29, Wherein Vegas media object authoring environment uses the mouse and keyboard therefore making use of two interfaces for editing the exact values via keyboard shortcuts, see page 37).

Regarding **Dependent claim 5**, with dependency of claim 1, wherein the editorial information processing unit includes: a data access application program interface for performing information exchange with the user interfacing unit; *an object editorial information processor for converting the multimedia editorial information supplied from the outside to the form applicable to the internal material structure and storing the converted multimedia editorial information; an object-based internal material structure for reading in the object-based interactive multimedia contents stored in a storage to thereby preserve said contents as internal materials, and storing editing and authoring information inputted from the outside as internal materials to thereby edit and author current contents; and a file input and output processor for performing an input and output process of edited and authored results related to the storage and carrying out the form conversion between the internal materials and input and output files.*

Vegas is an object based multimedia authoring software wherein the video is represented by frame objects and the audio with peak objects (see page 1, introduction & page 29). Vegas provides the user with an interface for object-based multimedia editing and authoring tools. The interface in Vegas includes the insertion and deletion of objects as shown on page 29 and displayed on the track view which defines the logical relationship between the video frames according to the timeline. Further including an interface with spatial allocation of the media objects which is represented has the entire track view area, where media objects can be placed at any time and any space for appropriate playback see page 46. Further this interface includes time information has defined on the ruler on page 29. The interface allows the user interactivity for modifying elements via cut/drag/paste operations by interacting with the media objects themselves while including information about the object in the track header section. Finally Vegas supports specific file formats for representation in the object format for editing of the multimedia components and the decoding into multiple formats for rendering purposes (see pgs 325-326). Further supporting text based media see pg 281.

Regarding **Dependent claim 6**, with dependency of claim 5, *wherein the object editorial information processor includes: a time allocation editorial information processing module for processing editorial information related to the time allocation of each media object; a spatial allocation editorial information processing module for processing editorial information for the spatial allocation of each media object; a user interactivity editorial information processing module for processing editorial information for the user*

*interactivity; and a property and logical structure editorial information processing module for processing editorial information for properties characterizing each media object.*

Vegas is an object based multimedia authoring software wherein the video is represented by frame objects and the audio with peak objects (see page 1, introduction & page 29). Vegas provides the user with an interface for object-based multimedia editing and authoring tools. The interface in Vegas includes the insertion and deletion of objects as shown on page 29 and displayed on the track view which defines the logical relationship between the video frames according to the timeline. Further including an interface with spatial allocation of the media objects which is represented has the entire track view area, where media objects can be placed at any time and any space for appropriate playback see page 46. Further this interface includes time information has defined on the ruler on page 29. The interface allows the user interactivity for modifying elements via cut/drag/paste operations by interacting with the media objects themselves while including information about the object in the track header section. Finally Vegas supports specific file formats for representation in the object format for editing of the multimedia components and the decoding into multiple formats for rendering purposes (see pgs 325-326). Further supporting text based media see pg 281.

Regarding **Dependent claim 7**, with dependency of claim 6,, *wherein the object editorial information processor further includes an object description information processing module for examining whether information for managing and searching media objects is proper or not, storing said information as internal materials and converting the object description information stored in the internal material structure to the form that the outside can refer to* (pg 33, wherein media objects are managed using the window docking area).

Regarding **Dependent claim 8**, with dependency of claim 6, *wherein the object editorial information processor performs the editorial information processing for a higher level authoring, a lower level authoring and the higher and lower level authoring* (see pgs 325-326, wherein the higher and lower leveling authoring includes encoding videos in different formats).

Regarding **Dependent claim 9**, with dependency of claim 5, *wherein the object-based internal material structure supports internal materials for a higher level authoring, those for a lower level authoring and those*

*for the higher and lower level authoring (see pgs 325-326, wherein the higher and lower leveling authoring includes encoding videos in different formats).*

*Regarding Dependent claim 10, with dependency of claim 5, wherein the file input and output processor includes: a file analyzing module for reading in the object-based interactive multimedia contents stored in the storage, storing the contents in the object-based internal material structure and examining errors of the contents by analyzing the contents; and a file generating module for transferring edited and authored results of the object-based interactive multimedia contents stored in the object-based internal material structure to the storage (pg 33, wherein the window docking area includes a file hierarchy for managing and loading media contents that are stored on the user's machine).*

*Regarding Dependent claim 11, with dependency of claim 10, wherein the file input and output processor further contains a form converting module for performing the form conversion between the internal material structure and the input and output form (see pgs 325-326, Vegas supports specific file formats for representation in the object format for editing of the multimedia components and the decoding into multiple formats for rendering purposes).*

*Regarding Dependent claim 12, with dependency of claim 11, wherein the form converting module changes a higher level authoring result to a lower level authoring result when the editing and authoring tool provides the higher and lower level authoring, and converts the edited and authored contents to the higher level file form which is not supported by the editing and authoring tool (see pgs 325-326, Vegas supports specific file formats for representation in the object format for editing of the multimedia components and the decoding into multiple formats for rendering purposes. Not all file formats are supported for encoding in Vegas, for example Dix X format files).*

*Regarding Dependent claim 13, with dependency of claim 1, wherein the media coding and decoding unit includes: a pre-post processor for performing a prior process and a post process required for the media coding and decoding; a media coder for encoding media data so as to produce a media stream; and a media decoder for decoding a media stream to reproduce media data (pg 21, wherein the importing is the decoding of saved media files into Vegas in the listed supported formats).*

Regarding **Dependent claim 14**, with dependency of claim 13, *wherein the media coder or decoder further includes a media processing accelerator, which is hardware, dedicated for performing the media coding and decoding in real-time or a higher speed than real-time (pg 21-22 & pg 378, wherein the CPU is the hardware dedicated to perform the decoding and coding using compression formats such as MPEG).*

Regarding **Independent claim 15**, *An object-based interactive multimedia contents authoring method for use in an object-based interactive multimedia contents authoring apparatus, comprising the steps of: securing a new internal material structure and a new authoring space on a user interface, and receiving a plurality of parameters or initializing the authoring space to preset defaults; providing for, on the user interface, (a) inserting or deleting media objects and editing properties characterizing each media object, (b) editing a logical relationship between the media objects' (c) editing a spatial allocation for the media objects, (d) editing a time allocation for the media objects, (e) editing a user interactivity for the media objects, and (f) displaying information for the media objects under editing; converting multimedia contents supplied from a user on an object basis to the form applicable to an object-based internal material structure supporting editorial information authoring; authoring object-based interactive multimedia contents by inserting and deleting media objects based on the initialized authoring space and editing the user interactivity on an object basis and properties of objects; and storing the authored object-based interactive multimedia contents in a binary or text form.*

Vegas is an object based multimedia authoring software wherein the video is represented by frame objects and the audio with peak objects (see page 1, introduction & page 29). Vegas provides the user with an interface for object-based multimedia editing and authoring tools. The interface in Vegas includes the insertion and deletion of objects as shown on page 29 and displayed on the track view which defines the logical relationship between the video frames according to the timeline. Further including an interface with spatial allocation of the media objects which is represented has the entire track view area, where media objects can be placed at any time and any space for appropriate playback see page 46. Further this interface includes time information has defined on the ruler on page 29. The interface allows the user interactivity for modifying elements via cut/drag/paste operations by interacting with the media objects themselves while including information about the object in the track header section. Finally Vegas supports specific file formats for representation in the object format for editing of the multimedia components and the



decoding into multiple formats for rendering purposes (see pgs 325-326). Further supporting text based media see pg 281.

Regarding **Independent claim 16**, *A computer readable medium on which a program used in implementing an object-based interactive multimedia contents authoring apparatus employing a processor is recorded, comprising: a first program instruction unit for securing a new internal material structure and a new authoring space on a user interface, and receiving a plurality of parameters or initializing the authoring space to preset defaults; a second program instruction means for providing for, on the user-interface, (a) inserting or deleting media objects and editing properties characterizing each media object, (b) editing a logical relationship between the media objects, (c) editing a spatial allocation for the media objects, (d) editing a time allocation for the media objects, (e) editing a user interactivity for the media objects, and (f) displaying information for the media objects under editing; a third program instruction for converting multimedia contents supplied from a user on an object basis to the form applicable to an object-based internal material structure supporting editorial information authoring; a fourth program instruction unit for authoring object-based interactive multimedia contents by inserting and deleting media objects based on the initialized authoring space and editing the user interactivity on an object basis and properties of objects; and a fifth program instruction unit for storing the authored object-based interactive multimedia contents in a binary or text form.*

Vegas is an object based multimedia authoring software wherein the video is represented by frame objects and the audio with peak objects (see page 1, introduction & page 29). Vegas provides the user with an interface for object-based multimedia editing and authoring tools. The interface in Vegas includes the insertion and deletion of objects as shown on page 29 and displayed on the track view which defines the logical relationship between the video frames according to the timeline. Further including an interface with spatial allocation of the media objects which is represented has the entire track view area, where media objects can be placed at any time and any space for appropriate playback see page 46. Further this interface includes time information has defined on the ruler on page 29. The interface allows the user interactivity for modifying elements via cut/drag/paste operations by interacting with the media objects themselves while including information about the object in the track header section. Finally Vegas supports specific file formats for representation in the object format for editing of the multimedia components and the decoding into multiple formats for rendering purposes (see pgs 325-326). Further supporting text based media see pg 281.

*It is noted that any citation **[[s]]** to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art.*  
***[[See, MPEP 2123]]***

#### **Response to Arguments**

7. Applicants' arguments filed on 2/15/07 have been fully considered, but are moot in view of the new grounds of rejection.


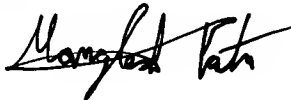
#### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manglesh M. Patel whose telephone number is (571) 272-5937. The examiner can normally be reached on M, W 6 am-3 pm T, TH 6 am-2pm, Fr 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Manglesh M. Patel  
Patent Examiner  
April 28, 2007



**STEPHEN HONG**  
SUPERVISORY PATENT EXAMINER